

## KDE100E3



### Features

#### Diesel Engine

With KIPOR KD series engine/ Cummins B, C, L, N, K series engine as the power source. Applicable to 13.5-920kW generator set.

Optional mechanical or electrical governor, with excellent speed response characteristics

Optional engine speed (1500rpm, 1800rpm, 3000rpm), which reflects the strong power and economic efficiency of the set.

Optimum power output characteristics

Engines are available with three different air intaking methods— natural aspiration, charged and charge inter-cooling.

#### Synchronous Alternator

KIPOR KFS Series Alternator

- Four-pole rotating magnetic field, self-ventilating radiation system formed by rotor blade
- 2/3 pitch winding, effectively eliminating the sub or ultra harmonic and increasing the paralleling capability
- excellent short circuit withstand ability
- Brushless rotating exciter with rotor/stator exciting system, three-phase rectified bridge
- Insulation grade: H

- Single-ended support mounting way minimizes the vibration of operating generator
- Standard wiring with three-phase four-wire and star connection output
- Auxiliary AVR ensures the steady state voltage deviation compliant with ISO 8528G3
- High quality electromagnetic winding coil
- Integrated design combining the AC output main winding and exciting system
- Rotor damper windings improve the output wave of generator and minimum the wave distortion
- Minimum the generator reactance characteristics
- Maximize the efficiency of electromagnetic induction power generation

#### Complete Auxiliary Equipment System

- The generator set is installed with internal vibration damper, controller, starting system and auto-monitoring system, to form an integrated power station generator set.
- The internal cushion is made of special rubber
- No need for additional cushion to connect and fix the base to ground.

#### Output

Apply connection pole for generator set full power output

ATS configuration option

ATS dual-power auto-switch system introduces the specialized dual-power switch with self-locker.

#### Control System

KI Series controller is a control system independently researched and developed by KIPOR. It applies

the microprocessor technology, with the function of measurement, control and protection, and accurately measures various parameters. Cooperating with its self-developed ATS module, it can realize the manual/auto switch control between the generator set and utility power.

### **Engine Protection**

Over/Under speed alarm/shut down

Starting fail shut down

Low oil pressure alarm/shutdown

High coolant temperature alarm/shutdown

Low fuel level alarm/shut.

Charging fault alarm

High/low battery voltage alarm

### **Internal Control**

- Manual/ automatic operation mode option
- Wireless remote start
- Electric door lock start
- Emergency shut down
- Engine speed testing
- Engine start
- Barring

### **Alternator**

• Over/Under voltage shut down

• Over current alarm/shut down

• Under frequency shut down

• Over frequency shut down

Standard protection

During the operation, the control system may display the fault on panel by lighting up the relative LED and revealing the fault code and explanation on LCD, with the internal buzzer sounding for alarm.

### **LCD Data Displays**

- Generator set parameters
- Engine speed
- Output frequency
- Output phase voltage
- Output line voltage
- Oil pressure
- Coolant temperature
- Oil temperature (optional)
- Fuel level
- Clock
- Battery voltage
- Battery charging current
- Output current
- Active power
- Reactive power
- Power factor
- Continuous running time
- Output power
- Grid frequency
- Grid three-phase phase voltage
- Grid network three-phase line voltage
- Fault history

<b>KDE100E3</b>	
Model	KDE100E3
Rated frequency(Hz)	50
Rated output(kVA/kW)	80
	64
Max. output(kVA/kW)	85
	68
Rated voltage(V)	230/400
Rated current(A)	115
Rated speed(r/min)	1500
Alternator manufacturer	KIPOR
Alternator model	KFS80
Pole number	4
Loop mode	Three-phase four-line(Y-connection)
Excitation mode	Brushless self-excitation and constant voltage (AVR)
Power factor(COS $\Phi$ )	0.8(lag)
Insulation grade	H
Engine manufacturer	KIPOR
Engine model	KD6105ZG
Cylinder block structure	Six-cylinder in-lined, four-stroke, direct injection, turbocharged, water cooled
BorexStroke(mm)	105×125
Displacement(L)	6.494

Compression ratio	17.5:1
Rated power(kW)	72
Capacity of cooling water (only engine) (L)	11.8
Lubrication system	Pressure splashed
Lube oil brand	Above CD grade or SAE 10W-30, 15W-40
Lube capacity(L)	18.5
Starting system	24V Electric starter
Starting motor capacity(V-KW)	24V 4.5kW
Charging generator capacity(V-A)	28V 35A
Battery capacity x number (V.Ah)	12V 120Ah x2
Fuel type	0#(summer)- 10#(winter)- 35#(chillness) diesel
Fuel consumption rate(g/kW.hr)	≤290
Panel type	Smart panel
Output - Voltage(V)	400/230 416/240
Output - Receptacle	N/A
Output	N/A
Noise level (7m)dB(A)	102 104
Structure type	Open-frame
Fuel tank capacity(L)	210
Continuous running time(hr)	7.5 6
Overall dimension(mm)	1960×850×1655(with silencer)
Dry weight(kg)	1320